



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,444	10/21/2003	Stephen J. Zadig	2503083-991010	3724

26379 7590 04/09/2004

GRAY CARY WARE & FREIDENRICH LLP
2000 UNIVERSITY AVENUE
E. PALO ALTO, CA 94303-2248

EXAMINER

ELKASSABGI, HEBA

ART UNIT PAPER NUMBER

2834

DATE MAILED: 04/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/690,444

Applicant(s)

ZADIG, STEPHEN J.

Examiner

Heba Elkassabgi

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/21/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22-30 is/are allowed.
- 6) ☒ Claim(s) 1-7, 17-21 and 31-34 is/are rejected.
- 7) ☐ Claim(s) 8-16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Priority

No foreign or domestic priority is claimed.

Drawings

The informal drawings are not of sufficient quality to permit examination. Accordingly, new drawings are required in reply to this Office action.

Specification

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1-7 and 31-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Manabe (U.S. Patent 5975865).

Manabe discloses in figures 3 a wave energy converter having a support structure (base block 2) fixed to a floor of a body of water (sea floor). A piston assembly having a housing (cylinder 6c) that forms a chamber containing an amount of pressurized fluid and having a first end attached to the support structure and a second end. A piston (piston portion 4) that is slidably disposed within the chamber (cylinder 6c), and a piston rod (piston tube 3) that is attached to the piston (piston portion 4) and that extends from the second end of the housing (cylinder 6c). A floatation device (float 7b) that is attached to the piston rod (piston portion 4), by way of the support structure. In which the piston rod is adapted to cause the piston (piston tube 3) to move upward in the chamber (cylinder 6c) in response to a rising wave, and to move downward by the force of gravity in response to a falling wave. The downward motion and gravitational force being effective to discharge the pressurized fluid from the chamber (cylinder 6c) and at least one reservoir (water passage 9) that is fluidly coupled to the piston assembly and that receives and stores the pressurized fluid. In regards to claim 2, a hydraulically driven power generator (water pump 1c) that is fluidly coupled to the at least one reservoir (water passage 9) and that receives and utilizes the pressurized fluid to generate electrical power. In regards to claim 3, a high-pressure reservoir (water passage 9) that is adapted to receive fluid from the piston assembly (cylinder 6c), and to communicate the fluid to the hydraulically driven power generator (water pump 1c) at a certain flow rate. In regards to claim 4, the high-pressure reservoir (water passage 9)

Art Unit: 2834

includes an adjustable valve that is adapted to control the certain flow rate. In regards to claim 5, a low-pressure reservoir (water passage 5c) that is fluidly coupled to the hydraulically driven power generator (wave pump 1c) and to the piston assembly (cylinder 6), the low pressure reservoir (water passage 9) being adapted to receive fluid from the hydraulically driven power generator (1c). In regards to claim 6, the piston divides the chamber (6c) into a charging chamber (5c) and a high pressure chamber (9), and wherein the piston assembly further comprises a conduit which fluidly couples the charging chamber (5c) to the high pressure chamber (9), thereby allowing fluid to be communicated from the charging chamber (5c) to the high pressure chamber as the piston moves upward in the chamber. In regards to claim 7, the support structure selectively adjustable in length as in Manabe. In regards to claims 31-34 the method claims are inherent in regards to the structural claims. Under the principles of inherency, if a prior art device, in its normal and usual operation, would necessarily perform the method claimed, then the method claimed will be considered to be anticipated by the prior art device. When the prior art device is the same as a device described in the specification, it can be assumed the device will inherently perform the same process. In re King, 802 F.2d 1324, 231 USPQ 136 (Fed. Cir. 1986).

Allowable Subject Matter

Claims 8-16 and 22-30 are allowed over the prior art.

Claims 8-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the

base claim and any intervening claims. The prior art does not disclose a control system that is adapted to monitor water conditions and to control operation of the wave energy converter based upon the monitored water conditions. Claims 22-30 are allowed over the prior art, which does not disclose a control system that is adapted to monitor water conditions and to control operation of the wave energy converter based upon the monitored water conditions.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heba Elkassabgi whose telephone number is (571) 272-2023. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Heba Y. Elkassabgi



**Nicholas Ponomarenko
Primary Examiner
Technology Center 2800**